

Notice of Allowability

Application No.

09/787,443

Examiner

Christopher J Nichols, Ph.D.

Applicant(s)

RONN ET AL.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 March 2004.
2. ☒ The allowed claim(s) is/are 98,114,123 and 135-152.
3. ☒ The drawings filed on 15 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Art Unit: 1647

DETAILED ACTION

Status of Application, Amendments, and/or Claims

1. The Response and Amendment filed 31 March 2004 has been received and entered in full.

Allowable Subject Matter

2. All Rejections and Objections as set forth in the previous Office Action (3 December 2003) are hereby *withdrawn* in view of Applicant's submissions and amendments (31 March 2004).
3. Pursuant to MPEP §706.07(e) in view of Applicant's amendments (31 March 2004), the finality of the previous Office Action (21 January 2004) is hereby *withdrawn*.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

In the claims:

Claims 1-97 (Cancelled)

Claim 98 (Currently Amended) A compound which is (1) a peptide of not more than 12 amino acid residues wherein the amino acid sequence of the peptide comprises the sequence (K/R)₀₋₁-(K/R)-X-(K/R), wherein X is any amino acid, said compound being capable of binding to the

Art Unit: 1647

~~NCAM Ig1-Ig2 domains, said peptide~~ consisting of an amino acid sequence selected from the group consisting of SEQ ID NOs: 1-4, 9, 12, 14, 15, 17, and 19-22, or (2) a compound consisting of four peptides ~~moieties~~ covalently linked to a backbone consisting of three lysines, ~~said peptides moieties each consisting of three lysines,~~ said peptides ~~moieties~~ each consisting of the same amino acid sequence, said sequence being selected from the group consisting of SEQ ID NOs: 1-4, 9, 12, 14, 15, 17, and 19-22, and wherein said compound is capable of binding to neural cell adhesion molecule (NCAM) or its isolated Ig1 or Ig2 domain.

Claims 99-113 (Cancelled)

Claim 114 (Previously Presented) A method of stimulating or promoting neurite outgrowth from NCAM presenting cells and/or proliferation thereof in an individual comprising administering to said individual an effective amount of a compound as defined in claim 149.

Claims 115-122 (Cancelled)

Claim 123 (Previously Presented) A pharmaceutical composition, comprising one or more of the compounds according to claim 149.

Claims 124-134 (Cancelled)

Art Unit: 1647

Claim 135 (Previously Presented) The compound according to claim 98 consisting of the sequence ASKKPKRNIKA (SEQ ID NO: 1).

Claim 136 (Previously Presented) The compound according to claim 98 consisting of the sequence AKKERQRKDTQ (SEQ IN NO: 2).

Claim 137 (Previously Presented) The compound according to claim 98 consisting of the sequence ARALNWGAKPK (SEQ IN NO: 3).

Claim 138 (Previously Presented) The compound according to claim 98 consisting of the sequence AGSAVKLKKKA (SEQ IN NO: 4).

Claim 139 (Previously Presented) The compound according to claim 98 consisting of the sequence ATNKKTGRRRR (SEQ IN NO: 9).

Claim 140 (Previously Presented) The compound according to claim 98 consisting of the sequence ARQKTMKPRRS (SEQ IN NO: 12).

Claim 141 (Previously Presented) The compound according to claim 98 consisting of the sequence ARKTRERKSKD (SEQ IN NO: 14).

Art Unit: 1647

Claim 142 (Previously Presented) The compound according to claim 98 consisting of the sequence ASQAKRRRRKGPR (SEQ IN NO: 15).

Claim 143 (Previously Presented) The compound according to claim 98 consisting of the sequence AKKEKPNKPND (SEQ IN NO: 17).

Claim 144 (Previously Presented) The compound according to claim 98 consisting of the sequence AEGGKKKKMRA (SEQ IN NO: 19).

Claim 145 (Previously Presented) The compound according to claim 98 consisting of the sequence AKKKEQKQRNA (SEQ IN NO: 20).

Claim 146 (Previously Presented) The compound according to claim 98 consisting of the sequence AKSRKGNSSLM (SEQ IN NO: 21).

Claim 147 (Previously Presented) The compound according to claim 98 consisting of the sequence ARKSRDMTAIK (SEQ IN NO: 22).

Claim 148 (Previously Presented) The compound of claim 98 which binds the NCAM Ig1 domain.

Art Unit: 1647

Claim 149 (Previously Presented) The compound of claim 148 which stimulates or promotes neurite outgrowth from NCAM presenting cell and/or proliferation thereof.

Claim 150 (Previously Presented) The compound (2) of claim 98, where each peptide moiety consists of SEQ ID NO:1.

Claim 151 (Previously Presented) The compound (2) of claim 98, where each peptide moiety consists of SEQ ID NO:2.

Claim 152 (Previously Presented) The compound (2) of claim 98, where each peptide moiety consists of SEQ ID NO:3.

5. Authorization for this examiner's amendment was given in a telephone interview with Iver Cooper (Reg. No. 28,005) on 20 April 2004.

Summary

6. Claims 98, 114, 123, and 135-152 are allowed.

7. The Examiner acknowledges that acceptance of the above Examiner's Amendment does not mitigate in any way, shape, or form, Applicant's right to pursue additional subject matter in continuation, continuation-in-part, and/or divisional applications pursuant to 35 U.S.C. §120 and §121.

Art Unit: 1647


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher James Nichols, Ph.D.** whose telephone number is **(571) 272-0889**. The examiner can normally be reached on Monday through Friday, 8:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gary Kunz, Ph.D.** can be reached on **(571) 272-0887**.

The fax number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

CJN
April 20, 2004


GARY KUNZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600